

June 17, 2002

FACT SHEET

PROPOSED RULE TO REDUCE TOXIC AIR POLLUTANTS FROM MERCURY CELL CHLOR-ALKALI PLANTS

TODAY'S ACTION

- The Environmental Protection Agency (EPA) is proposing a regulation to reduce emissions of mercury from mercury and mercury compounds from cell chlor-alkali plants.
- Mercury cell chlor-alkali plants are facilities engaged in the production of chlorine and caustic using mercury cells. The source category includes 11 plants located in 10 states.
- Today's proposed action would reduce air emissions of mercury from a number of vents and emission stream sites in the mercury cell production and storage processes. This action would also cover fugitive air emissions - those that do not pass through a stack or a duct designed to control their flow. .
- EPA worked with stakeholders, including mercury cell chlor-alkali plants, industry representatives, and state and local agencies in developing the proposal.
- EPA will accept comment on the proposal through 90 days after publication of the proposed rule in the *Federal Register*. After reviewing all comments, the Agency anticipate issuing the final rule in 2002

BACKGROUND

- The Clean Air Act Amendments of 1990 requires EPA to reduce air emissions of 188 listed toxic air pollutants. Mercury is included on this list.
- The Clean Air Act also requires EPA to identify categories of industry or "source categories" that emit one or more listed 188 hazardous air pollutants. EPA identified mercury cell chlor-alkali plants as a source category emitting one or more toxic air pollutants.
- For major sources within each source category, the law requires EPA to develop standards that restrict emissions to levels consistent with the lowest-emitting (also called best-performing) plants.
- Major sources are those that emit 10 tons a year or more of a single toxic air pollutant or 25 tons a year or more of a combination of air toxics. EPA estimates that about 8 refractory

products manufacturing facilities are major sources.

HEALTH AND ENVIRONMENTAL BENEFITS

- The proposed rule would reduce mercury air emissions from mercury cell chlor-alkali by 1,500 pounds per year - a 73 percent reduction from current levels.
- Mercury is a pollutant of particular concern because it is highly toxic, persists in the environment and bioaccumulates, particularly in fish. Those characteristics cause mercury to move through the food chain and biomagnify. When a pollutant *biomagnifies*, it increases in concentration in tissues as it moves through the food chain, from algae or sediments to shellfish to fish to fish-eating birds and mammals. Human exposure to mercury occurs primarily through the food chain. Mercury exposure can cause health problems in humans and animals including birth and developmental effects. Exposure to mercury is also associated with neurological effects such as tremors, nervousness, insomnia, neuromuscular changes (such as weakness, muscle atrophy, and muscle twitching), headaches, and memory loss.
- EPA estimates the total annual costs for facilities to comply with the proposed rule to be \$1.5 million, including cost for new control devices, monitoring, record keeping and reporting. No facility or company is expected to close as a result of this regulation. The generally small scale of the impacts suggests that there will also be no significant impacts on markets for the products made using chlorine or sodium hydroxide.

WHAT THE PROPOSED RULE REQUIRES

- The proposed rule applies to all existing mercury cell chlor-alkali plants. EPA estimates that eleven existing mercury cell chlor-alkali plants would be subject to this proposal.
- The proposed rule would require plants to reduce toxic air pollutant emissions beyond the level achieved using the equipment and procedures currently in place at the best controlled mercury cell chlor-alkali plants. To meet the proposed standards, some existing facilities would need to install additional controls or upgrade existing controls. Some existing facilities would only need to schedule maintenance more frequently for existing air emission control equipment.
- The proposed rule includes both limits on air emissions of mercury and mercury compounds and requirements for work practices.
- The proposed rule would set limits on the amount of mercury that may be released from several air emission vents as well as fugitive emission sources associated with mercury cell chlor-alkali plant production processes and storage areas.
- For the numerous fugitive emission sources throughout the cell room and other plant areas EPA

is proposing a set of rigorous work practice standard such as to mitigate fugitive mercury releases.

- This rule would also require monitoring to ensure that emissions at each vent do not exceed allowable limits. Performance testing, to check the reliability of emissions monitors, would also be required twice during each term of the facility's operating permit.
- Mercury cell chlor-alkali plants would have up to 2 years after promulgation to comply with the new rule. EPA estimates that no new mercury cell chlor-alkali plant will be built in the future.

FOR MORE INFORMATION

- ! To download a copy of the proposed rule, go to EPA's World Wide Web site at <http://www.epa.gov/ttn/oarpg/> under newly proposed or issued rules.
- ! For further information about the proposed rule, contact Mr. Iliam D. Rosario of EPA's Office of Air Quality Planning and Standards at (919) 541-5308 or rosario.iliam@epa.gov.
- ! Send any comments on the propose rule making (in duplicate if possible) to: Air and radiation Docket and Information Center (6102), attention: Docket No. A-2000-32, Room M-1500, U.S. Environmental Protection Agency, 401 M Street, SW, Washington, DC 20460. You may also submit comments and data by electronic mail (e-mail) to: A-and-R-Docket@epamail.epa.gov.
- ! Submit electronic comments as an ASCII file to avoid the use of special characters and encryption problems or in WordPerfect® version 5.1, 6.1, or Corel® 8 file format. Electronic comments and data must note the docket number (Docket No. A-2000-32). You may file electronic comments online at many Federal Depository Libraries. Do not submit confidential business information (CBI) by e-mail. See the *Federal Register* notice for more information on how to handle the submittal of CBI.
- ! EPA's Office of Air and Radiation's homepage on the Internet contains a wide range of information on the air toxics program, as well as many other air pollution programs and issues. The Office of Air and Radiation's homepage address is: <http://www.epa.gov/oar/>.